country occupied by our observers; such isotherms are controlled largely by the local topography, and should be drawn and studied in connection with a contour map.

The *highest mean* temperatures were: Key West, 74.8; Jupiter, 72.0; Titusville, 70.0. The *lowest mean* temperatures were: In the United States, St. Vincent and Williston, 20.0; Bismarck, 22.2; and in Canada, Prince Albert, 14.0; Minnedosa, 14.4; Qu'Appelle, 16.2; Winnipeg, 16.8.

As *compared with the normal* for October the mean temperature of the current month was in excess in the Middle States and New England, but elsewhere generally deficient.

The greatest excesses were: New Brunswick, 3.2; Vineyard Haven, 3.0; Boston, 2.7; Nantucket, 2.6; Eastport, 2.4. The greatest deficits were: Williston, 7.9; Bismarck, 6.7; Rapid City, 4.0; Pierre, 3.4; Abilene, 3.3.

Considered by districts the mean temperatures for the current month show departures from the normal as given in Table I. The greatest positive departure was: New England, 2.1. The greatest negative departures were: North Dakota, 4.8; Abilene (southern Slope), 3.3.

The years of highest and lowest mean temperatures for November are shown in Table I of the REVIEW for November, 1894. The mean temperature for the current month was the highest on record at: Eastport, 39.8; Boston, 45.4; Nantucket, 47.2; Vineyard Haven, 48.8; Harrisburg, 44.0. It was the lowest on record at: Fresno, 52.8; Eureka, 48.8; and Baker City, 34.2.

The *maximum and minimum temperatures* of the current month are given in Table I. The highest maxima were: Los Angeles (18th), 94; Key West (10th), Yuma (19th), San Diego (15th), Red Bluff (6th), 85; Jacksonville (9th), Tampa (8th), 84. The lowest maxima were: St. Vincent (17th), 48; Idaho Falls (2d), Baker City (1st), Spokane (19th), Tatoosh Island (15th), 56; Santa Fe (21st), 57. The highest minima were: Key West (21st), 63; Jupiter (21st), 48; Port Eads (26th), 45; Tampa (21st), San Francisco (26th), 42. The lowest minima were: St. Vincent (29th), —16; Williston (8th), —14; Moorhead (22d), Lander (24th), —12; Bismarck (22d), —11.

The limit of freezing weather is shown on Chart VI by the isotherm of minimum 32, and the limit of frost by the isotherm of minimum 40.

The years of highest maximum and lowest minimum temperatures for November are given in the last four columns of Table I. During the current month the maximum temperatures were the highest on record at: Portland, Me., 69; Nantucket, 66; Albany, 70; Harrisburg, 75; Port Huron, 69; Green Bay, 68; Columbus, Ohio, 77; Parkersburg, 78; Norfolk, 80; Columbia, S. C., 83; Cincinnati, 78; Lexington, 78; Louisville, 79; Tatoosh Island, 62; Eureka, 74; San Francisco, 83. The minimum temperatures were the lowest on record at: Eureka, 32; Fresno, 29; San Diego, 38.

The greatest daily range of temperature and the extreme monthly ranges are given for each of the regular Weather Bureau stations in Table 1, which also gives data from which may be computed the extreme monthly ranges for each station. The largest values of the greatest daily ranges were: Pueblo, 56; Winnemucca and San Luis Obispo, 48; Carson City, 47; Bismarck, Sioux City, and North Platte, 46; Amarillo and Fort Smith, 45; Dodge City, 44. The smallest values were: Key West, Tatoosh Island, and Fort Canby, 14; Astoria, 16; Galveston and Seattle, 17; Nantucket, Hatteras, East Clallam, and Port Angeles, 18; Charleston and Port Eads, 19. Among the extreme monthly ranges the largest values were: Lander, 78; North Platte, 77; Bismarck, 75; Williston, Huron, and Pueblo, 74; Moorhead and Denver, 73. The smallest values were: Fort Canby, 21; Key West, 22; Tatoosh Island, 23; Astoria, 24; Olympia, 29; Port Eads and Port Angeles, 31.

The *accumulated monthly departures* from normal temperatures from January 1 to the end of the current month are given in the second column of the following table, and the average departures are given in the third column, for comparison with the departures of current conditions of vegetation from the normal conditions.

Districts.	Accumulated departures.		Districts.	Accumulated departures.	
	Total.	Average.		Total.	Average.
	°	°		°	°
New England	+ 2.2	+ 0.2	Middle Atlantic	— 8.8	— 0.8
North Dakota	+ 0.2	0.0	South Atlantic	—16.5	— 1.5
Missouri Valley	+ 0.9	+ 0.1	Florida Peninsula	—13.5	— 1.2
Northern Plateau	+ 2.4	+ 0.2	East Gulf	—18.1	— 1.6
			West Gulf	—19.9	— 1.8
			Ohio Valley and Tenn.	—13.4	— 1.2
			Lower Lake	— 7.8	— 0.7
			Upper Lake	— 1.0	— 0.1
			Upper Mississippi	— 3.0	— 0.3
			Northern Slope	—12.0	— 1.1
			Middle Slope	— 6.0	— 0.5
			Abilene (southern Slope)	—21.6	— 2.0
			Southern Plateau	— 8.2	— 0.7
			Middle Plateau	—13.4	— 1.1
			North Pacific	— 3.7	— 0.3
			Middle Pacific	— 6.5	— 0.6
			South Pacific	— 8.7	— 0.8

MOISTURE.

The *quantity of moisture* in the atmosphere at any time may be expressed by the weight contained in a cubic foot of air, or by the tension or pressure of the vapor, or by the temperature of the dew-point. The mean dew-points for each station of the Weather Bureau, as deduced from observations made at 8 a. m. and 8 p. m., daily, are given in Table I.

The *rate of evaporation* from a special surface of water on muslin at any moment determines the temperature of the wet-bulb thermometer, but a properly constructed evaporometer may be made to give the *quantity* of water evaporated from a similar surface during any interval of time. Such an evaporometer, therefore, would sum up or integrate the effect of those influences that determine the temperature as given by the wet bulb; from this quantity the *average humidity of the air* during any given interval of time may be deduced.

Sensible temperatures.—The sensation of temperature experienced by the human body and ordinarily attributed to the condition of the atmosphere depends not merely on the temperature of the air, but also on its dryness, on the velocity of the wind, and on the suddenness of atmospheric changes, all combined with the physiological condition of the observer. The condition of the atmosphere as to moisture is so important that it has, by exaggeration, been sometimes considered as a controlling feature and the temperature of the wet-bulb thermometer, when whirled in the shade, has been called the sensible temperature, although this is often but a partial index of the sensation of temperature. In order to present a monthly summary of the atmospheric conditions on which hygienic and physiological phenomena depend, the moisture must be fully considered, and therefore Table VIII has been prepared, showing the maximum, minimum, and mean readings of the wet-bulb thermometer at 8 a. m. and 8 p. m., seventy-fifth meridian time. A complete expression for the relation between atmospheric conditions and nervous sensations is under consideration, but has not yet been obtained.

PRECIPITATION.

[In inches and hundredths.]

The *distribution of precipitation* for the current month, as determined by reports from about 2,500 stations, is exhibited on Chart III. The numerical details are given in Tables I, II, and III. The precipitation was heaviest, 8.00 to 12.00, over a small portion of the coasts of Oregon and Washington.